Performance Measure Profile

Commercial Space Launch Accidents FY 2013 Methodology Report



Performance Measure Applicability		
☐ DOT Strategic Plan	☑ Destination 2025	
Goal: n/a	Goal: Move to the Next Level of Safety	
Outcome: n/a	Outcome: There are no fatalities resulting from commercial space launches.	
Metric: n/a	Metric: No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	
☐ Agency Priority Goal		

FY 2013 Performance Target

No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.

Lead Organization: Commercial Space Transportation (AST)

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Target	0	0	0	0	0
Actual	0	0	0	0	TBD

Definition of Metric

Metric Unit:	Number of accidents resulting in fatalities, injuries, or significant property damage.
Computation:	The number of accident occurrences is calculated.
Formula:	Count of the number of occurrences.
Scope of Metric:	This metric focuses only on commercial space launch or reentry activities licensed or permitted and monitored by the FAA. "Significant" property damage is defined as any damage estimated to exceed \$25,000 to property not associated with flight. On board crew members and space flight participants are NOT considered "uninvolved" members of the public.
Method of Setting Target:	Space launch is inherently risky. Over the past 25 years there have been no fatalities, serious injuries or significant property damage. A metric of zero was set to maintain that record.

Why the FAA and/or DOT Choose this Metric

Protecting the uninvolved public during launch and reentry operations is an FAA safety mission objective. Commercial space transportation is the means by which payloads such as satellites and remote sensing devices are carried to orbit; these payloads have tremendous benefit to our society. Commercial space launch or reentry accidents can potentially have major catastrophic consequences, involving large losses of life and property. The uninvolved public expects to be protected from the potential dangers and hazards associated with commercial space launch and reentry activities. There has not been a single commercial space launch accident since the first DOT licensed launch took place in 1989, and DOT is working to keep this safety record perfect.

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Public Benefit

AST's oversight of the commercial space launch industry activities resulted in no loss of life or property damage to the uninvolved public.

Partners

Department of Defense, NASA, Commercial Space Industry. All entities work in partnership to ensure protection of the public, property and national security and foreign policy interests of the U.S.

External Factors Affecting Performance

Use of advanced technologies may increase risk. Misrepresentations from licensee could result in inaccurate identification of hazards that may affect public safety.

Source of the Data

The source of the data is the Office of the Associate Administrator for Commercial Space Transportation (AST). Specifically, AST monitors all licensed launch operations and maintains documented reports of each licensed event. These reports are generated by AST's assigned field inspectors and duty officers for each launch event. They include all relevant details pertaining to the outcome of the licensed launch or reentry operation, including the occurrence of any public fatalities, injuries, or property damage. AST will utilize other sources of data such as the launch vehicle operator, and federal, local and State government officials.

Statistical Issues

None.

Completeness

AST's Licensing and Safety Divisions maintain and verify reports that an accident resulting from a licensed or permitted launch operation has occurred. The Divisions support coordination with other federal agencies, including the National Transportation Safety Board (NTSB) and the military, on any subsequent investigations.

Reliability

If an accident occurs, the FAA and the NTSB will complete official reports fully documenting circumstances associated with the event.

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